

BEFORE THE GLACIERS swept across northwestern Pennsylvania, the Pymatuning was what it is today—a lake. But the great ice movements gouged out the hills of the area, filled in the valleys, and left the almost-level contours of land evident in that section today. The lake was reduced to a swamp. Paradoxically, man has reversed the works of the Ice Age and, to the joy of hunters, sportsmen, and naturalists, created a lake from this once great bog.

Just north of Hartstown, Pa., the Shenango River originates. It flows northward to the present upper lake (the refuge area), aeross the spillway into the main lake, turning sharply south in both Ohio and Pennsylvania toward Espyville, Pa., and Andover, Ohio, then southeast to Jamestown, Pa., and the current dam. Crooked Creek originates just north of Hartstown also, yet it flows south. The dividing line between it and the source of the Shenango River is almost imperceptible.

In 1913, the Pennsylvania legislature passed the Pymatuning Dam Act which authorized the present lake.

After years of delay and land aequisition, the upper lake was impounded in Deeember, 1933. The lower lake was closed some weeks later. The Pennsylvania Game Commission has since leased the upper reservoir from the Department of Forests and Waters. This tract was set aside as a game

refuge in 1935.

The Pymatuning was dammed primarily for water conservation and flood control in the Shenango and Ohio River valleys. It comprises 25,000 aeres, of which 17,000 acres are water and 8000 acres are land. The lake is 16 miles long with 70 miles of shoreline and is the largest body of water in the state. It lies partly in Ohio, has a capacity of 67,275,000,000 gallons and a maximum depth of 35 feet.

# Crooked-Mouthed Man's Dwelling Place

The name Pymatuning is of Indian origin and means "Crooked-mouthed man's dwelling place," the term "erooked-mouthed" referring to an ancient Red Man who was not famous for truth telling.

Since originally leasing the upper reservoir area, the Game Commission



SILHOUETTE DECOYS such as these are sometimes used at Pymatuning by hunters. They are easier to handle than full-body types.

has continually improved that area's wildlife management. It has purchased additional lands around the perimeter of the upper lake. It manages a total of 11,000 acres, 4160 of which are leased from the Department of Forests and Waters. Cultivation is the byword, and this practice has resulted in the Pymatuning's tremendous success as a Canada goose nesting, migration stopover, and wintering area. More about

that aspect later.

Many of the fields had to be developed into farmlands, and others had to be reelaimed after years of idleness. Drainage ditches were built, and it also was neeessary to lay field tile to provide drainage in many of the table top flat fields. The size of the fields was greatly expanded to lure geese to the refuge. Unfortunately, these large migratory waterfowl are not impressed with a 10-aere comfield. From their high-altitude migration levels it takes a huge expanse of feed to both eateh their eye and lure them into deseending. Otherwise they fly to a more southerly destination that has a more perfect wintering habitat. Some 2200 aeres are under agricultural eultivation. Yearly, 750 aeres are planted in corn, 200 aeres in buek-wheat, 200 aeres in rye, 200 aeres in wheat, and 80 aeres each in sweet corn and beans for the commercial market. The remaining aereage is maintained as pasture, as grasses are the primary food requirement for Canada geese.

Puddle dueks feed in the grain fields, but their primary food requirement is the plant life produced in a marsh area. Accordingly, the Game Commission has diked several areas (several hundred acres) in the upper lake refuge to provide the constant and low water levels necessary for nesting and

food production.

The nearby Conneaut Marsh and Sandy Lake areas also are a part of the total waterfowl management program in the Pymatuning area. These two areas are under the Public Law 566 program as administered by the Soil Conservation Commission. The Sandy Lake area is being developed primarily for dueks. The Conneaut Marsh comprises the outlet of Conneaut Lake. The Game Commission manages it with field plantings, mowing, wood duek nesting boxes, goose nesting boxes, and a 500-aere diked pool for water level control.

#### Ducks and Geese Banded

Each year the Game Commission raises and bands approximately 10,000 dueks, mostly mallards, and 300 Canada geese. Additionally, some 200 geese and 12,000-14,000 dueks of various species are captured and banded. The results of the bandings have been informative. See subtitle "Research

Projects" later in this article.

Beeause of the abundant wildlife and their nests, predators are a problem, and the Commission maintains a predator control program. Raceoons are egg stealers and efficient at taking nesting and young birds. They pose the most critical problem. Expert trappers live trap about 100 of these furbearers each year. Snapping turtles find young waterfowl a delicacy. Accordingly, an expert is given a permit to trap about 100 snappers annually. At times it has been necessary to trap horned owls near the Commission's

waterfowl rearing pens.

Since the area originally was intended to be a wildlife refuge, it was not historically planned that the Pymatuning be a major nesting site for Canada geese or other migratory waterfowl. It was intended that the area be a resting place for migratory birds during their fall and spring flights. It was discovered, as noted previously, that geese could not be lured into a refuge simply by hanging out refuge signs around its perimeter. Many attractions for geese had to be incorporated first. Pymatuning Waterfowl Agent Ray Sickles, from experience and visits to other refuge areas, found out that vast fields of grasses and grains were the primary tool for persuading a migrating gaggle of geese to stop. Thus, the Game Commission embarked on a program to provide these expansive fields, all with the idea of persuading waterfowl to utilize the area during migration flights. The results have been phenomenal. Not only do migrating geese stop in large numbers, but a nesting and summering population of 3000 birds has been established, along with a wintering population of similar number.

Peak fall populations occur about the middle of October when migration is at its peak, with about 15,000 geese in the refuge. It is impossible to determine how many geese use the area each year because the birds are arriving and leaving all during the

migratory season.

The nesting population has been an uphill battle. Geese are not sexually mature until three years of age, and only about three birds from a spring clutch survive to their first fall. However, each year, mainly because of the controlled hunting practices, the Pymatuning native goose population is increasing in size. At the same time, hunter success in the area increases yearly.

Increased hunting pressure on ducks and geese, while migration is in progress, results in poorer hunting success. When waterfowl are shot at and harassed constantly, they simply leave the area for their already predetermined wintering area farther south. This is the major reason for the current regulations in force at the Pymatuning Goose Management Area.

On the controlled portion, shooting is from sunrise to noon only. Shooting days are Monday, Wednesday, Friday and Saturday. This leaves every afternoon and three days for geese to feed unmolested. Consequently, they stay

in the area longer.

To encourage shooting only at geese in range, hunters are restricted to a limit of 10 shells. To provide more sport to more hunters, the federal limit of two geese is further reduced in this county (Crawford) to one goose. Federal limits on ducks prevail. Hunters may use the controlled goose area only once each year. Dogs are permitted.

Applications for hunting the controlled Pymatuning Waterfowl Area are available from Game Protectors and the Game Commission in Harrisburg and Hartstown, Pa. A drawing of eligible applicants is held prior to the hunting season, and each successful

HUNTERS SHOULD NOT SHOOT until certain their targets are within range. To the inexperienced, a goose's large size makes him look closer than he is.



entrant is notified of the date he is eligible to hunt. One thousand names are drawn. Sueeessful reservation holders are required to report to the Goose Management Building north of Hartstown at least one-half hour before shooting time. A drawing is then held to assign the 40 individual blinds. A reservation holder may bring three guests.

### Waterfowl Checked

After the hunt all waterfowl bagged are brought back to the Goose Management Building to be weighed, sexed and aged. Over 2500 Canada geese are taken annually on the controlled area. Game Commission personnel estimate another thousand are bagged in the surrounding area. This is roughly seven times the hunter success ratio prior to the beginning of the goose management program.

Good hunting exists on the State Game Lands near the controlled area. Also, the State Game Lands of the Conneaut Marsh and the Sandy Lake area provide additional hunting to the general public.

When the reservoir was first filled, the low water level areas around the lake provided excellent duck nesting habitat. Alders, marsh weeds, eattails, and similar plant life offered the low eanopy eovering needed. For several years, Pymatuning duek populations were tremendous. Then a tree-type overstory began to take over and the low, thick habitat that produced such wonderful nesting eover was lost.

Duek populations are still good, however. The most prevalent nesting species are mallards, black ducks, wood ducks, blue-winged teal, and gadwalls. More important is the use of the area by a wide variety of migrating ducks. Some ducks are using the refuge as wintering grounds.

Sinee 1967, areas J, L, and K have been utilized in a controlled duck shooting program. These areas, similar to the goose management areas, are open Monday, Wednesday, Friday and Saturday. Fifty hunters are permitted in each area. Selection is on a first come, first served basis, with applicants lining up single file at the Goose Management Building. Hunting ends at noon. Identification tags are issued, ducks are the only legal game, and ducks must be presented at the Management Building after the hunt for weighing, sexing, and aging.

Public shooting grounds surround-

THIS GROUP OF HUNTERS HAS downed four honkers and is heading back to the Goose Management Building where the geese will be aged, sexed and weighed.



ing the Goose Management Area, and both the Sandy Lake and Conneaut Marsh areas are open for duck hunting as well as goose hunting.

# Other Migratory Species

A wide variety of interesting migratory birds other than ducks and Canada geese is abundant. Many nest in the refuge and surrounding area. Of major importance as nesters are coots, gallinules, sora and Virginia rails, doves, little green herons, black-crowned night herons, and, perhaps most important, great blue heron nests has been established in the east side of Black Alder Swamp. Of course, many other migratory birds nest and pass through the Pymatuning, too—hundreds of them songbirds.

## Bird Watchers' Paradise

The only bald eagles believed to nest in Pennsylvania are located within the waterfowl area. This is of special importance because so few of these birds remain. Indiscriminate shooting and the use of DDT have drastically reduced their numbers. DDT, it has been found, seriously affects the fertility of eggs. This poison is not used in the management area. An average of one of the three existing nests

produces young each year.

In total, over 100 species of birds nest in the Pymatuning region. Bird lovers seeking to see new species find it especially interesting. Song and insectivorous birds are abundant. The fertile lake water produces tremendous numbers of insects. Of special importance, too, are the shore birds. And not to be forgotten are the many hawks, owls, and vultures. Twelve different species are known to nest in the area. Grain crops which are left standing over winter create a high rodent population. Native flying predators and those which migrate from the North in some winters make use of

Groups can get special permits to enter the refuge area for bona fide sci-



WHILE HIS DAD proudly watches, Larry Heffernan of Franklin displays his first Canada goose, taken at the Pymatuning.

entific or educational reasons. No guide service is provided. Don't figure you'll get a pass just because you want a snapshot of an American bald eagle, however. The vcry nature of a refuge requires that wildlife is not disturbed by people.

## Other Hunting Available

Antlerless deer hunting has been provided in the Goose Management Area in certain past years. The number of hunters entering is regulated to keep the total within safe limits. In most years the management area is open for grouse, squirrel and rabbit during Pennsylvania's extended small game season. Hunters entering the area must register and are issued an identification badge.

In future years further hunting of species other than waterfowl on this area may be in order. This will be in line with the Game Commission's expanding policy of multiple use. Management practices for geese and ducks obviously benefit other game animals,

including deer, squirrel, pheasant, and rabbits. Additionally, these management practices have made the area the great nesting site of nongame birds it is. Hunters can take pride in the fact that their license monics have completely financed an environment highly beneficial to many interests other than their own.

### Waterfowl Museum

Annually, 350,000 people visit the Waterfowl Museum, located on Ford Island. The Game Commission maintains it to display mounted specimens of most of the birds that nest or visit the Pymatuning. Over 300 specimens, all taken in the immediate area, are on display. To aid hunters and bird watchers, many of the species are shown both standing and poised in flight to better show their identifying marks and characteristies. Parking and admission are frec. Hours during May, June, October and November are 10 a.m. to 5 p.m. Hours for July, August and September are 10 a.m. to 7 p.m.

To groups applying in advance, the Game Commission will provide lectures on the birds and the area as their time permits. Groups which have utilized this favor by the Commission in the past have included grade, high school and college groups, National Audubon Society, Boy and Girl Scouts, 4H Clubs, Future Farmers of America (they are particularly interested in the agriculture of the goose management area), bird study clubs and other interested naturalists.

An addition to the museum also holds display cases. They show various species of birds as families; i.e., a male, female, and young, a female and the cggs, etc. Also included are some of the furbearing animals of the region.

Another room is specifically designed for lectures to groups. It is

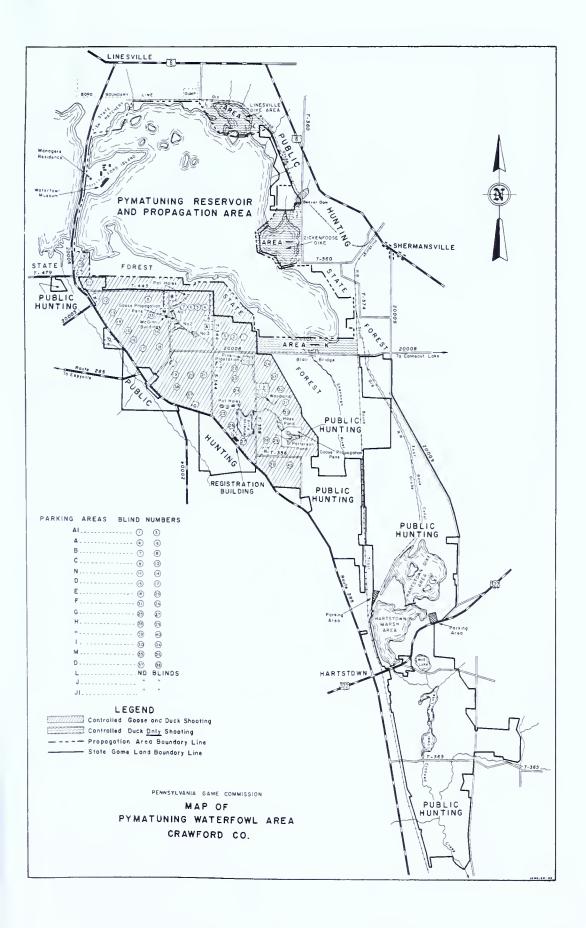
equipped with screen, motion and slide picture projectors, podium, and seating. The Game Commission is going to considerable time and expense to educate the general public about the region and its wildlife—again solely with monies derived from the sale of hunting licenses.

# Research Projects

Waterfowl banding at Pymatuning has been a major project. From this research the following conclusions can be drawn. Though mallard bands have been returned from many areas, the majority of those that migrate through Pymatuning nest in the prairie pothole country of the Dakotas, Manitoba and Saskatchewan, and winter in South Carolina, Tennessee, and Kentucky. Black ducks nest in the wooded lake country of Quebec and Ontario and winter in the Chesapeake Bay area. Canada gcesc migrating through Pymatuning nest on the various islands in Hudson Bay and in the Ungava Peninsula, and winter inland in Kentucky, Tenncssee, Alabama and South Carolina. Significantly, geese nesting at Pymatuning are more inclined to fly to the Gulf States.

### Summary

The Gamc Commission has endeavored to both preserve and enhance the wildlife environment of the Pymatuning. Their success at doing so has resulted in a well-established model of gamc management. The goose hunting has become famous across the country, and the Game Commission has spent much money to increase its potential. But the result has been far greater than the goose story. The real story of Pymatuning includes all the other wildlife species that have profited through the years by the Game Commission's works.





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